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Claims

SubB12

1. Method for producing fittings for the mechanical processing, in particular refining, of suspended fibrous material, which fittings comprise at least one base body (1, 1') and at least one processing element (2, 2') that is wetted by the fibrous material suspension during operation of the fitting and composed at least mainly of ceramic material, with processing element (2, 2') and base body (1, 1') being produced separately and then joined together rigidly at their contact surfaces (3, 4), characterized in that the base body (1, 1') is made of a fiber reinforced plastic material with a thermal expansion behavior that has been adapted to that of the processing element (2, 2').
2. Method according to claim 1, characterized in that the base body (1, 1') is made of a glass-fiber reinforced plastic material.
3. Method according to claim 1, characterized in that the base body (1, 1') is made of a carbon fiber reinforced plastic material.
4. Method according to claim 1, 2 or 3, characterized in that the thermal expansion coefficient in the contact surfaces (3, 4) of the base body (1, 1') and of the processing element (2, 2') is identical within $\pm 25\%$.

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5. Method according to claim 1, 2, 3 or 4 characterized in that the base body (1, 1') and processing element (2, 2') are joined together at their contact surfaces (3, 4) by adhesive forces.
6. Method according to claim 5, characterized in that the adhesive forces are applied by a largely rigid adhesive layer.
7. Method according to claim 6, characterized in that the thickness of the adhesive layer is no more than 0.5 mm.
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8. Method according to one of the preceding claims, characterized in that the base body (1, 1') and the corresponding processing element (2, 2') are joined together by several spaced mounting elements.
9. Method according to one of the preceding claims, characterized in that strips (4) are produced towards the fibrous material side during manufacture of the processing element (2, 2').
10. Method according to claim 9, characterized in that the width (b) of the strips (4) is between 1 and 30 mm.
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11. Method according to one of claims 9 or 10, characterized in that the strips (4) are provided with a projection (c) above the base of the groove, which is between 1 and 20 mm.
12. Method according to one of the preceding claims, characterized in that the processing elements (2, 2') are provided with an essentially smooth surface on the faces (11).
13. Method according to one of claims 1 through 11, characterized in that the processing elements (2, 2') are provided with an essentially porous surface (11) on the faces (11').

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14. Method according to one of the preceding claims, characterized in that at least one recess (6') is made in the base body (1'), into which an elevation (7') on the processing element (2, 2') fits when the processing element (2, 2') and base body (1') are joined.
15. Method according to one of the preceding claims, characterized in that the base body (1, 1') is embodied in annular form.
16. Method according to one of claims 1 through 14, characterized in that the form of the base body (1, 1') is essentially that of an annular segment.
17. Fitting for refining suspended fibrous material, comprising a base body (1, 1') to be mounted in a refiner, and at least one connected processing element (2, 2') made of ceramic, which is wetted by the fibrous material suspension during operation of the fitting and then acts together with another processing element (2, 2') moved relative to it to achieve the refining effect, characterized in that the base body (1, 1') is made of a fiber reinforced plastic material and is rigidly joined to the processing element (2, 2') by a force-locked join over at least 80% of the contact surface.
18. Fitting for refining suspended fibrous material, comprising a base body (1, 1') to be mounted in a refiner, and at least one connected processing element (2, 2') made of ceramic, which is wetted by the fibrous material suspension during operation of the fitting and then acts together with another processing element (2, 2') moved relative to it to achieve the refining effect, characterized in that the base body (1, 1') is made of a fiber reinforced plastic material and is rigidly joined to the processing element (2, 2') by a force-locked join in points in at least two places.
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